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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/034,745	12/28/2001	Richard E. Smalley	11321-P012USD3	2473

7590

09/26/2003

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EXAMINER

MAPLES, JOHN S

ART UNIT

PAPER NUMBER

1745

DATE MAILED: 09/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/034,745

Applicant(s)

SMALLEY ET AL.

Examiner

John S. Maples

Art Unit

1745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 31-33 and 163-188 ~~is/are~~ are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 31-33 and 163-188 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 31-33, drawn to a method of forming a macroscopic array, classified in class 427, subclass 903.

II. Claim 163, drawn to a method of forming a large array, classified in class 427, subclass 903.

III. Claims 164-165, drawn to a parallel array, classified in class 428, subclass 457.

IV. Claims 166-169 and 172-174, drawn to a membrane, classified in class 210, subclass 348.

V. Claims 170-171, drawn to a fullerene intercalation compound, classified in class 428, subclass 445B.

VI. Claims 175-176, drawn to a photocell, classified in class 136, subclass 243.

VII. Claims 177-180, drawn to a battery, classified in class 429, subclass 188.

VIII. Claims 181, 184-187, drawn to a lithium-ion battery, classified in class 429, subclass 231.8.

IX. Claim 182, drawn to a second lithium-ion battery, classified in class 429, subclass 209.

X. Claim 183, drawn to a third lithium-ion battery, classified in class 429, subclass 231.4.

XI. Claim 188, drawn to a fuel cell, classified in class 429, subclass 30.

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Art Unit: 1745


2. The inventions are distinct, each from the other because of the following reasons: the five battery/fuel cell Groups VII-XI are distinct from the other groups because the same include an anode, cathode and electrolyte, which features are not part of the other groups. Also, Group XI is different than the four battery groups VII-X because in the fuel cell, at least one reactant is continually fed into the cell, which feature is different than the battery groups. The four battery Groups VII-X are different from one another because they include different structures. For example, Group IX includes fibers which do not form part of any of the other three groups. Group X comprises a fullerene compound different than the other groups. Finally, Group VII includes a membrane made of carbon while Group VIII comprises an anode made of carbon. Group VI is distinct from all of the other groups since it includes a photocell. Likewise Group V comprises a fullerene compound additionally having a chemical species in a nanotube thus distinguishing it from the Group X battery and all of the other groups. The membrane of Group IV is materially different than Groups I-III and is conductive thus being different than the Group VII battery/membrane. Groups I and II are distinct because the same comprise materially different steps. Finally, Group III could be made by different methods such as that described in either Group I or Group II.
3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.
4. Because of the degree of the complexity of the above restriction requirement, the same is being handled via written correspondence.

Art Unit: 1745

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John S. Maples whose telephone number is 703-308-1795. The examiner can normally be reached on Monday-Thursday from 6:15-3:45.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 703-308-2383. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



John S. Maples
Primary Examiner
Art Unit 1745

JSM/9-25-2003